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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/269,972	04/08/1999	YUKIO NAKAJIMA	Q53854	1844

7590 11/03/2003

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EXAMINER

GARCIA OTERO, EDUARDO

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 11/03/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/269,972

Applicant(s)

NAKAJIMA, YUKIO

Examiner

Eduardo Garcia-Otero

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 October 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-19.

Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☒ Other: See Attachment.

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Advisory Action

Introduction

1. Title is: TIRE DESIGN METHOD, OPIMIZATION ANALYZING APPARATUS, AND STORAGE MEDIUM...
2. First named inventor is: NAKAJIMA
3. Claims 1-19 have been submitted, examined, and rejected.
4. Priority is claimed to PCT/JP97/02783 filed on 08 August 1997.
5. The Examiner appreciates Applicant's assistance in correcting procedural problems with the Office Action mailed 12/18/02. These procedural problems were corrected in the Office Action mailed 5/15/03.

Applicant Remarks

6. LINEARITY AND NON-LINEARITY. Remarks page 2-6. Applicant unpersuasively asserts that Kamegawa does not disclose a non-linear objective function. Specifically, Applicant states "Applicant believes that Kamegawa is limited to linear objective function, and has not found any disclosure that the objective function of Kamegawa is also directed to non-linear functions" at Remarks page 4.
7. The Examiner maintains that Kamegawa's "objective function" at FIG 2 should be interpreted broadly as disclosing both linear and non-linear objective functions to one of ordinary skill in the art. The prior office action discussed in great detail why Kamegawa's "sensitivity" enables non-linear objective functions, and implicitly discloses non-linear objective functions. The relevant portion of the prior office action is repeated for convenience, emphasis added:

The Examiner notes that Kamegawa is using a technique for maximizing (or minimizing) the objective function which is useful when the objective function is non-linear. Using "sensitivities" (in place of the constant derivative of a linear function) to predict the maximum of the objective function implies (though does not require) that the objective function is non-linear. **Similarly, repeating these predictions until the objective function converges implies (though does not require) that the objective function is non-linear. Note that if the objective function was linear, then the "sensitivity" for each design variable would not have to be repeatedly calculated.** Thus, Kamegawa's procedure is explicitly designed to handle non-linear objective functions, though Kamegawa does not explicitly state the term "non-linear". If Kamegawa's objective functions were limited to linear functions, then simpler predictive algorithms could be used. Thus, Kamegawa implicitly discloses non-linear functions.

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The term "local derivative" was introduced by the Examiner, and not by Kamegawa. If the system was linear, then the derivative (or "sensitivity") would be constant, and the derivative could be calculated once (locally, similar to Kamegawa's sensitivity), and the derivative would remain constant (globally).

In summary, the whole point of Kamegawa's objective optimization search algorithm is to allow for non-linearity.

8. Thus, Examiner has provided substantial technical reasons supporting interpreting Kamegawa's "objective function" at FIG 2 should be interpreted broadly as disclosing both linear and non-linear objective functions to one of ordinary skill in the art.

9. The Applicant has not provided any persuasive reasons why Kamegawa's term "objective function" should be interpreted as "linear objective function". The term "linear objective function" is not used by Kamegawa. One of ordinary skill in the art would interpret Kamegawa's term "objective function" broadly, without adding the limitation "linear".

10. MOTIVATION. Remarks page 6-8. Applicant unpersuasively asserts that Kamegawa "teaches away from the claimed invention". Specifically, Applicant unpersuasively distinguishes the claimed invention's "predictive process" from Kamegawa's "iterative calculations". Applicant unpersuasively asserts that "These schemes are believed to be entirely different and incompatible".

11. It appears that Kamegawa's iterative calculations (based upon sensitivities) do disclose the term "predicted" of claims 3, 6, 18. Specifically, Kamegawa's sensitivities are used to predict.

Conclusion

12. All pending rejections are maintained.

13. All pending claims are rejected.

14. Applicant's Response received 10/7/03 is entered.

Communication

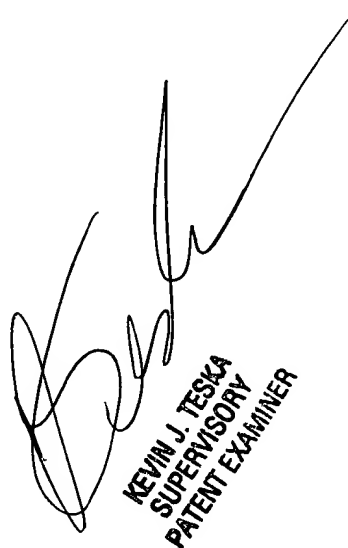
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Garcia-Otero whose telephone number is 703-305-0857. The examiner can normally be reached on Monday through Thursday from 9:00 AM to 8:00 PM. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

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supervisor, Kevin Teska, can be reached at (703) 305-9704. The fax phone number for this group is 703-872-9306.

16. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (703) 305-3900.

* * * * *



KEVIN J. TESKA
SUPERVISORY
PATENT EXAMINER